

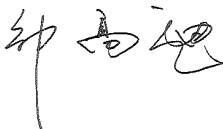
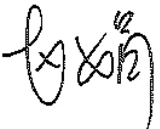
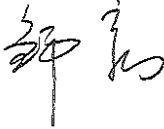

SPECIFICATION

Product Name: Sensor DIM LED Driver

Model No.: MLC40C-P4

Issue Date: May 23, 2018

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED
			

Shenzhen Merrytek Technology Co.,Ltd

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1. Features



- Ultra-slim design for Tri-proof LED light
- Unique design with sensor detector makes the drivers suitable to fix within luminaries
- DIP setting allows the user easy to adjust sensor parameters

2. Parameter

Input	Operating Voltage Range	198-264V AC, 50Hz/60Hz
	Input Current	≤0.23A
	Rated Voltage	220-240V AC, 50Hz/60Hz
	Load Power	≥0.90 (230V full load)
	Stand-by Power	≤1W
	Working efficiency	85% (230V Max load)
	Wiring method	Press terminal, wire diameter:0.75-1.5mm ²
Output	Working Model	Constant current
	Type of Load	LED
	No-load output voltage	55V DC Max
	Full load power	40W Max
	Load output voltage range	30-42V DC
	Load output current	950mA
	Wiring method	Press terminal, wire diameter:0.75-1.5mm ²
Sensor Parameters	Operating Frequency	5.8 GHz ±75 MHz , ISM Band.
	Transmitting power	1mW Max.
	Hold time	5S/90S/3min/10min
	Stand-by DIM Level	10%/25%
	Stand-by Period	0S/30S/10min/ +∞
	Detection Area	25%/ 50%/ 75%/ 100%
	Daylight Sensor	5lux/15lux/30lux/Disable
	Daylight on/off	N/A
	Detecting Radius	4-6m (mounting height 3m) (see note2)
	Mounting Height	6m Max.
	Detecting Angle	150° (Wall mounted), 360° (Ceiling mounted)

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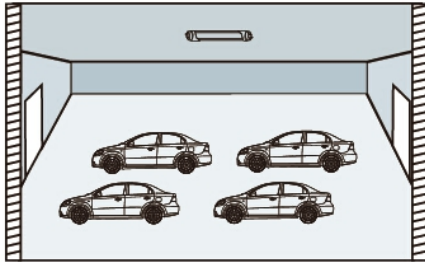
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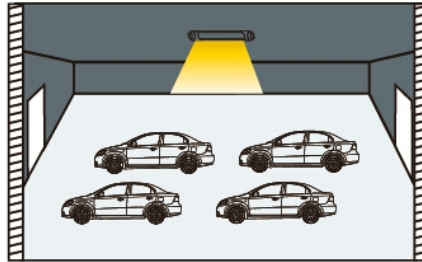
Wireless Module	Operating Frequency	N/A
	Transmitting power	N/A
	Transmitting distance	N/A
	Modulation mode	N/A
	Number of coding	N/A
Operating Environment	Operating Temperature	-25℃...+50℃
	Storage Temperature/Humidity	-40℃...+80℃ (Humidity: 85% Non-condensing)
Certificate Standards	Safety standards	EN61347-1, EN61347-2-13
	EMC standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	Environmental Requirement	Compliant to RoHS
	Certificate	TUV, CE
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in installation
	Dimension	Main Part: 212*42*30mm Sensor Head: 55*20*13.5mm
	Net Weight	162.6g
	Package	Bubble bag+Clapboard + Carton(K=A)
	Lifetime	30,000h @Ta 230V full load
<p>Note</p> <p>1. "N/A" means not available.</p> <p>2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.</p>		

2. Function

1) On/OFF Function(Stand-by period set at '0S')



① With sufficient ambient light, the light will not be switched on even if with motion signal.

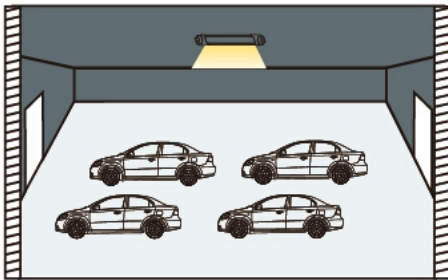


② With insufficient ambient light, the sensor switches on the light when motion is detected.

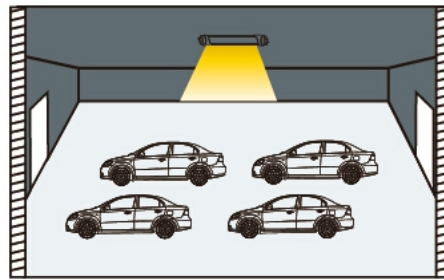


③ After elapse of hold time, the sensor switches off the light when no motion is detected.

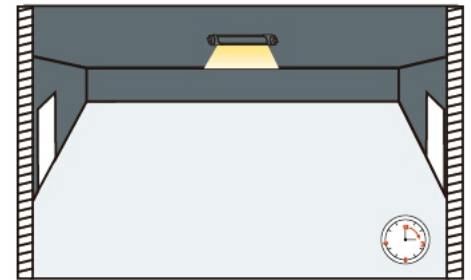
2) 2-step dimming function(stand-by period set at "+∞")



① If there is no motion detected, the light will be remained at a low light level all the time.

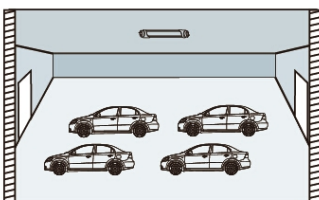


② When motion is detected, the sensor will switch on the light to 100% brightness

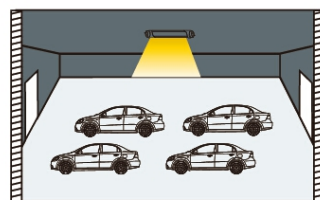


③ After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

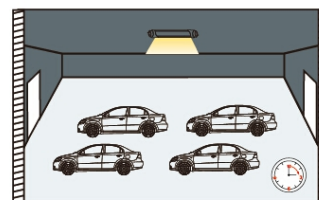
3) 3-step dimming function(Stand-by period set at '30S/10min')



① With sufficient ambient light, the light will not be switched on even if with motion signal.



② With insufficient ambient light, the sensor switches on the light when motion is detected.

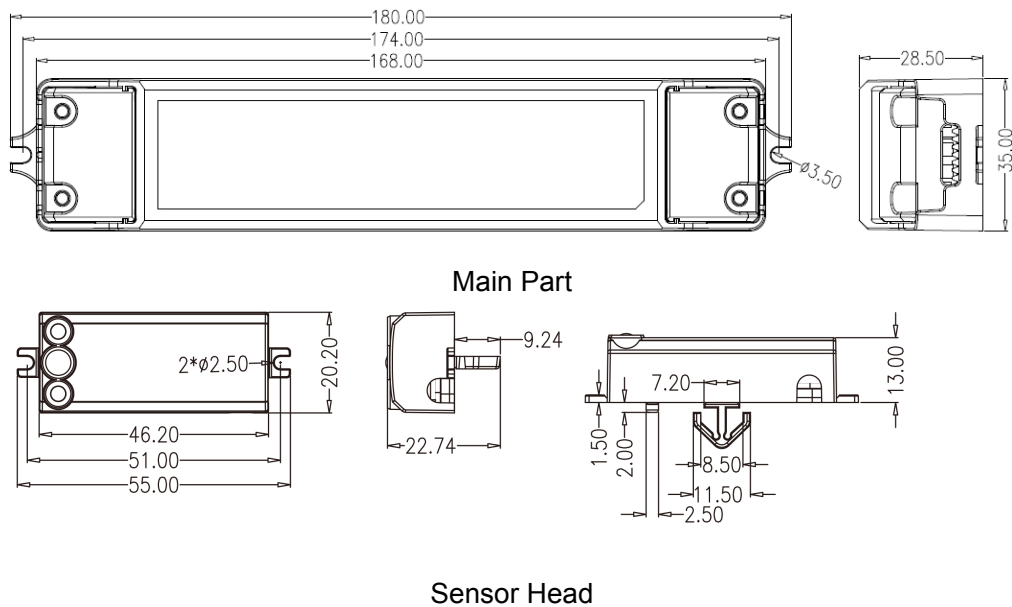


③ After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.

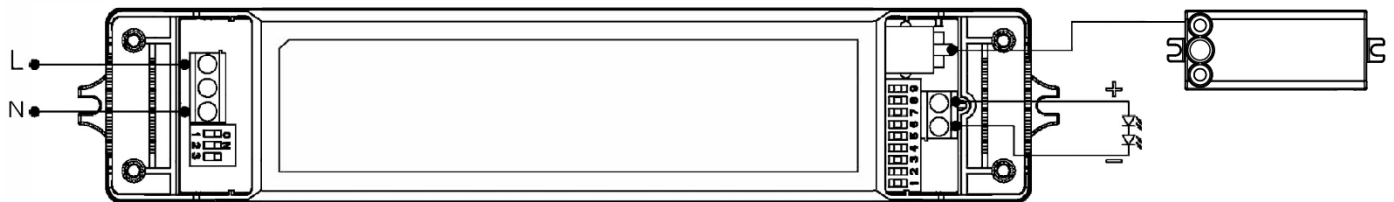


④ After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.

4. Dimension (mm)

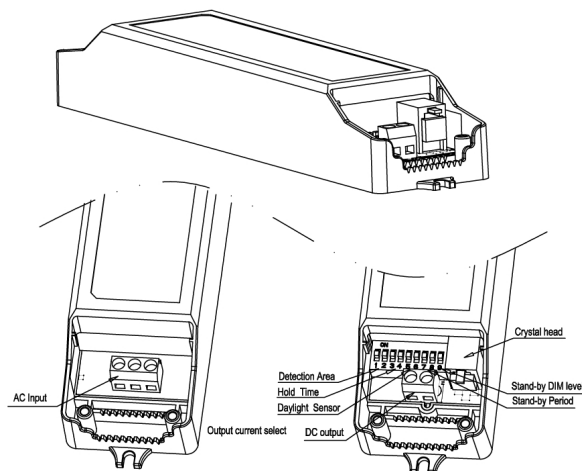


5. Wiring



*The sensor is designed for connect one load only. Connect more than one loads may damage the sensor.

6. Structure



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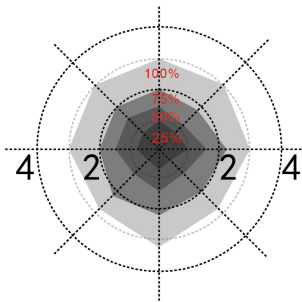
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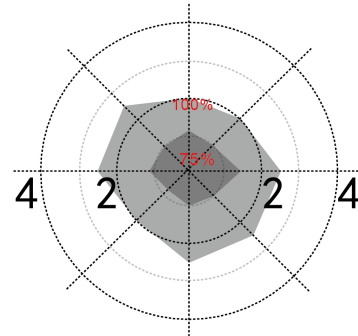
7. Radiation Pattern

Ceiling mounting

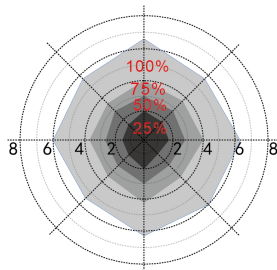
Ceiling mounted height: 3m
Sensitivity: 100%/75%/50%/25%



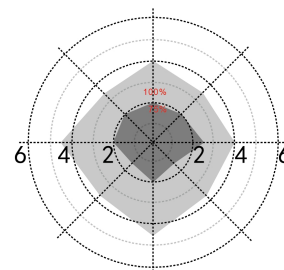
Ceiling mounted height: 6m(*)
Sensitivity: 100%/75%



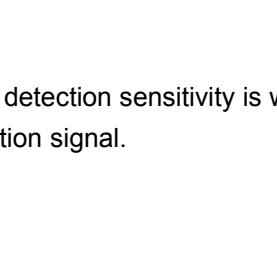
Normal moving (Speed: 1m/s)



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

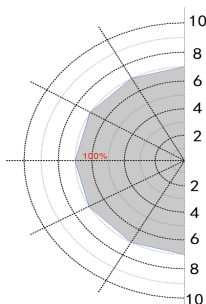


Slow moving (Speed: 0.3m/s)

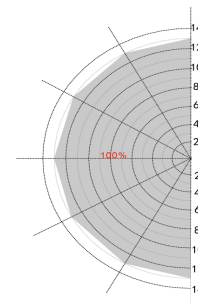
*Only 100%/75% detection sensitivity is workable when installed at 6m mounting height. 25%/50% sensitivity is not able to detect motion signal.

Wall mounting:

Horizon mounted height: 1.5m
Sensitivity: 100%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

8. DIP Switch Setting

1)Detection Area (Sensitivity)

	1	2	
I	ON	ON	100%
II	ON	-	75%
III	-	ON	50%
IV	-	-	25%

2)Hold Time

	3	4	
I	ON	ON	5S
II	ON	-	90S
III	-	ON	3min
IV	-	-	10min

3)Daylight Sensor

	5	6	
I	ON	ON	Disable
II	ON	-	30lux
III	-	ON	15lux
IV	-	-	5lux

*Disable means the daylight sensor does not work. The sensor will turn on light once motion is detected regardless of ambient light level.

4)Stand-by Period

	7	8	
I	ON	ON	0s
II	ON	-	30s
III	-	ON	10min
IV	-	-	+∞

5)Stand-by DIM Level

	9	
I	ON	10%
II	-	25%

9. Initialization

1) On/Off function /3-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

2) 2-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

10. Factory Setting

Detection area: 100%, Hold Time: 5S, Daylight Sensor: Disable,Stand-by DIM level:10%,Stand-by period:30s

11. Application Notice

Be sure to power off before adjusting DIP switch setting.

12. Version Change

Version	Date	Description
A0	May 23 , 2018	Released new product

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